

拒絶理由通知書

特許出願の番号 特願2001-388566
起案日 平成18年10月12日
特許庁審査官 右田 昌士 9513 2L00
特許出願人代理人 岩壁 冬樹 様
適用条文 第29条第2項、第36条、第37条

この出願は、次の理由によって拒絶をすべきものである。これについて意見があれば、この通知書の発送の日から60日以内に意見書を提出して下さい。

理 由

理由1

この出願は、下記の点で特許法第37条に規定する要件を満たしていない。

記

請求項1-12に記載される発明は、液晶光学素子及びその検査方法に関するものであり、請求項13に記載される発明は、サービス品目の在庫状況に対応して表示されるサービス品目が変更され得るように構成されてなるメニュー表示システムに関するものであるので、両者は、明らかに特許法第37条各号に規定する関係を有すると認められない。

この出願は特許法第37条の規定に違反しているので、請求項1-12以外の請求項に係る発明については新規性、進歩性等の要件についての審査を行っていない。

理由2

この出願の下記の請求項に係る発明は、その出願前に日本国内又は外国において、頒布された下記の刊行物に記載された発明又は電気通信回線を通じて公衆に利用可能となった発明に基いて、その出願前にその発明の属する技術の分野における通常の知識を有する者が容易に発明をすることができたものであるから、特許法第29条第2項の規定により特許を受けることができない。

記 (引用文献等については引用文献等一覧参照)

請求項1-6 引例1-3

請求項7 引例1-4



請求項 8 引例 1-3, 5
請求項 9 引例 1-3, 6
請求項 10 引例 1-3, 6, 7
請求項 11, 12 引例 1, 8

備考

請求項 1-6 について

引例 1 (発明の詳細な説明第 1, 9, 13, 14 段落) において、焼き付き防止のために「電極と液晶層との間に境界層」の硬さが軟らかい方がよいという課題は周知 (例えば引例 2 (発明の詳細な説明第 39-42 段落) 参照) であり、引例 1 の配向膜として、引例 3 (第 1 頁右欄) に記載されている、鉛筆硬度 6B 程度のものを採用し、請求項 1-6 に係る発明とすることは、当業者にとって容易である。

請求項 7 について

引例 1 において、セグメント表示 (周知: 例えば引例 4 参照) を行うことは、当業者が容易に想到し得ることである。

請求項 8 について

引例 2 の発明の詳細な説明第 43 段落には、樹脂材料の構造安定性のために、ある程度の弾性率が必要であることが記載されており、引例 1 において室温でのヤング弾性率が 1 kPa 以上 (周知: 例えば、引例 2 (発明の詳細な説明第 43 段落)、引例 5 (発明の詳細な説明第 80 段落) 参照) の配向膜を採用し、請求項 8 に係る発明とすることは、当業者にとって容易である。

請求項 9, 10 について

引例 6 (実施例) に記載されている、プレチルト角 60° 以上の第 2 の樹脂膜を、引例 1 において適用し、請求項 9 に係る発明とすることは、当業者にとって容易である。

また、その際に、引例 7 (第 2 頁左下欄最下行～同頁右下欄第 1 行) に記載されている、一方の基板のみに垂直配向膜を設ける構造を、引例 1 において付加し、請求項 10 に係る発明とすることも、当業者にとって容易である。

請求項 11, 12 について

引例 8 (発明の詳細な説明第 2, 42-44, 58, 59 段落) に記載された検査方法を、引例 1 の検査方法として適用し、請求項 11, 12 に係る発明とすることは、当業者にとって容易である。

引用文献等一覧

引例 1: 特開平 11-288008 号公報

引例 8：特開平 8-114803 号公報

特開平10-168455号公報（発明の詳細な説明第5, 39, 47, 50段落）

特開平10-225960号公報（発明の詳細な説明第25段落）

この先行技術文献調査結果の記録は、拒絶理由を構成するものではない。

Reference No. 20010916

Dispatch No. 468399

Dispatch date: October 17, 2006

Official Action

Patent Application No. 2001-388566
Drafting date: October 12, 2006
Examiner of the JPO: Masashi MIGITA 9513 2L00
Patent Attorney: Fuyuki IWAKABE
Applied Law: Patent Law Sections 29(2), 36 and 37

This application should be refused for the reason mentioned below.
If the applicant has any argument against the reason, such argument should be submitted within 60 days from the dispatch date.

REASON

REASON 1

This application does not comply with the requirements prescribed in Patent Law Section 37 in terms of the following item.

Note

The inventions defined in Claims 1 to 12 are directed to a liquid crystal optical element and a test method therefor, while the invention defined in Claim 13 is directed to a menu display system, which is configured so that service items to display can be modified according to the availability of service items. Both groups of the inventions do not comply with the requirements prescribed in Patent Law Section 37.

Since this application does not comply with the requirements prescribed in Patent Law Section 37, the other claim than Claims 1 to 12 has not been examined in terms of patentability, such as novelty and inventive step.

REASON 2

The invention of the following claims of the this application should not be granted a patent under the provision of Patent Law Section 29(2) since it could have easily been made by persons who have common knowledge in the technical field to which the invention(s) pertains, on the basis of the invention(s) described in the publication(s) listed below, which was distributed or made available to the public through electric telecommunication lines in Japan or elsewhere prior to the filing of the this application.

NOTE (With respect to the citations, refer to the list of citations.)

| | |
|------------------|---------------------------|
| Claims 1 to 6 | Citations 1 to 3 |
| Claim 7 | Citations 1 to 4 |
| Claim 8 | Citations 1 to 3 and 5 |
| Claim 9 | Citations 1 to 3 and 6 |
| Claim 10 | Citations 1 to 3, 6 and 7 |
| Claims 11 and 12 | Citations 1 and 8 |

Examiner's remarks

With regard to Claims 1 to 6

In Citation 1 (paragraphs 1, 9, 13 and 14 of Description), the problem that the "boundary layer between an electrode and the liquid crystal layer" should have a lower hardness in order to avoid the image-sticking phenomenon is well known (see, e.g., Citation 2 (paragraphs 39 to 42 of Description)). It would have been obvious to a person having ordinary skill in the art to attain the inventions defined in Claims 1 to 6 by adopting, as the alignment layer of Citation 1, one having a hardness of about 6B in terms of pencil hardness.

With regard to Claim 7

It would have been obvious to a person having ordinary skill in the art to perform a segment display in Citation 1 (well-known: see, e.g., Citation 4).

With respect to Claim 8

Citation 2 discloses in paragraph 43 of Description that some degree of coefficient of elasticity is needed in order to stabilize a resin material in terms of structure. It would have been obvious to a person having ordinary skill in the art to attain the invention defined in Claim 8 by adopting an alignment layer having a Young's modulus of 1 kPa or above at room temperature (well-known: see, e.g., Citation 2 (paragraph 43 of Description, and Citation 5 (paragraph 80 of Description)) in Citation 1.

With respect to Claims 9 and 10

It would have been obvious to a person having ordinary skill in the art to attain the invention defined in Claim 9 by applying a second resin layer having a pretilt angle of 60 deg disclosed in Citation 6 (Example), to Citation 1.

It would have been obvious to a person having ordinary skill in the art to attain the invention defined in Claim 10 by adding the structure wherein a vertical alignment layer is disposed only on one of the substrates as disclosed in Citation 7 (page 2, lower left bottom line to lower right line 1), to Citation 1.

With respect to Claims 11 and 12

It would have been obvious to a person having ordinary skill in the art to attain the inventions defined in Claims 11 and 12 by applying the test method disclosed in Citation 8 (paragraphs 2, 42 to 44, 58 and 59 of Description), as the test method disclosed in Citation 1.

List of Citations

Citation 1: JP-A-11-288008

Citation 2: JP-A-5-196925
Citation 3: JP-A-62-123425
Citation 4: JP-A-7-104297
Citation 5: JP-A-11-167126
Citation 6: JP-A-3-107925
Citation 7: JP-A-57-79518
Citation 8: JP-A-8-114803

Reason 3

This application does not comply with the requirements prescribed in Patent Law Section 36(6)(i) in terms of the following items:

Note

In Description, the problem of avoiding the image-sticking phenomenon, a method for solving the problem and an advantage offered by the method are described.

On the other hand, although the inventions defined in Claims 1 to 10 specify the "surface hardness of the boundary layer", it is necessary to specify other items, such as the liquid crystal material, the material of the boundary layer, the driving method, the cell parameter, and the production method, in addition to the "surface hardness of the boundary layer", in order to avoid the image-sticking phenomenon.

The inventions defined in Claims 1 to 10, which fail to specify these items, cover modes, which do not offer the advantage of avoiding the image-sticking phenomenon. It is considered that these claims cover other modes than the ones disclosed in Description.

Accordingly, the inventions defined in Claims 1 to 10 are not supported by Description.

If the applicant wants to inquire about the outstanding official action or to hold an interview, please contact with Migita (extension 3293), First Patent Examination Department, Optical Devices Division (liquid crystal elements).

Record of the result of prior art search
Technical field(s) to be searched: Int. Cl(8)

G02F1/1337
G02F1/1333
G02F1/1343
G02F1/137 TO 1/141
G02F1/13, 101

PRIOR ART REFERENCE(S)

JP-A-10-168455 (paragraphs 5, 39, 47 and 50 of Description)

JP-A-10-225960 (paragraph 25 of Description)

This record is not a component(s) of the reason(s) for refusal.